

SUMMARY

Chromosome number determinations for 26 taxa of North America indicate twenty of these to be tetraploid ($n=24$), two to be octaploid ($n=48$), and four taxa to be both tetraploid and octaploid.

A hybridization study involving eight species of Northwest United States shows genetic incompatibility barriers to be poorly developed between these species, thus supplying a possible reason for the overlapping patterns of morphological variation found in the genus *Lupinus*.

Department of Field Crops,
North Carolina State College, Raleigh

LITERATURE CITED

- KAWAKAMI, N. 1930. Chromosome number in Leguminosæ. Bot. Mag. Tokyo 44: 319.
 MAUDE, M. 1940. Chromosome numbers in some British Plants. New Phytol. 39: 17.
 PHILLIPS, L. 1955. A revision of the perennial species of *Lupinus* of North America. Res. St. State Coll. Wash. 23: 161.
 SAVCHENKO, N. 1936. Karyology of some species of the genus *Lupinus*. Bull. Appl. Bot. Select. II 8: 105.
 TJIO, J. and A. LEVAN. 1950. The use of oxyquinoline in chromosome analysis. An Aula Dei 2: 21.
 TUSCHNJAKOWA, M. 1935. Über die chromosomen einiger *Lupinus*-Arten. Züchter 7: 169.

JEROME D. LAUDERMILK

Mr. Jerome D. Laudermilk, who passed away in January, 1956, was a general scientist. The originality of his inquisitive mind impressed those who knew him well. He read widely and probed deeply as he read. Characteristically he was not satisfied to accept Leeuwenhoek's account of his microscope until he had ground lenses and made a microscope of his own exactly according to Leeuwenhoek's formula. The structure of ancient weapons was a special field of research, and he lectured and demonstrated his models publicly and for the Pomona College Department of Military Science and Tactics. He was interested so deeply in the operations of those who deal in the occult that at one time he was kidnapped, taken to an obscure house, and convinced that his life would be longer if he did not write on the subject.

Jerry Laudermilk was a graduate of Kansas State College of Pharmacy, and he served in the United States Army in World War I. Being in ill health he spent several years in the desert near Wickenburg, Arizona, where he developed a deep interest in and knowledge of desert vegetation. He came to southern California thirty-five years ago, and he lived for the last thirty years in Claremont, where he was Research Associate in Geochemistry and Paleobotany at Pomona College. There, in association with Dr. Philip A. Munz, he investigated the food habits of extinct giant sloths by study of the dung of the animals in the caves they inhabited in the deserts near the Colorado River. This has provided knowledge of the past vegetation of the area.

His interests carried him into many problems concerned with plants, minerals, fossils, and other natural objects. In his investigation of plants Mr. Laudermilk was never satisfied with the statements in books. He went directly to nature and drew or wrote from what he found there. He was an excellent illustrator of books and scientific papers and a painter of ability. He wrote many popular articles presenting science and especially botany and geology as a layman would enjoy it, and in these he brought knowledge from many fields to bear on matters commonly approached by a single avenue. His illustrations and manuscripts found their way into such journals as *Natural History*, *Desert Magazine*, and *Westways*. His last work was the principal series of illustrations for the writer's textbook entitled "Plant Classification," scheduled to be published in February, 1957. Mr. Laudermilk clung to life for many months in the hope of seeing these illustrations in print, and it is a great regret to the author that he was not able to do so.—LYMAN BENSON, Department of Botany, Pomona College, Claremont, California.

ASTRAGALUS AGNICIDUS, A NEW LOCOWEED FROM HUMBOLDT COUNTY, CALIFORNIA

R. C. BARNEBY

The known history of the *Astragalus* described below goes back about twenty-five years, when Mr. Henry Tosten, the original discoverer, moved with his family to a ranch situated high in the outer North Coast Range near the divide between the South Fork of the Eel and the Mattole River in southern Humboldt County. Suffering great losses among his sheep, Mr. Tosten quickly identified this species as the culprit. In the summer of 1931 he prepared herbarium material and sent it to the late Mr. J. P. Tracy of Eureka, the outstanding authority on the flora of the region, and the specimens passed in due course to the University of California Herbarium at Berkeley, where I came across them in the winter of 1949. In May, 1954, I was able to visit the Tosten place and the genial owner obligingly took me up to the ridge above the ranch-house, the original station, where the locoweed still survived in sparing quantity. I am indebted to Mr. Tosten for the following information.

No sooner was the *Astragalus* recognized as poisonous than vigorous steps were taken to root it out. It was restricted to a wooded ridge, where the natural vegetation had been disturbed by logging, and was so abundant in early years that it was possible to collect great piles of stems for burning. Since then intermittent but never wholly successful attempts were made to control or exterminate it, and plans were afoot in 1954 to clear off the hilltop and plough it out. Mr. Tosten early assumed that the plant was an introduced weed; and it is said to be unknown to other ranchers in the community or county. A company of bark-strippers was